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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,895	08/07/2001	Sanil Kumar Puthiyandyil	01-592	2243

7590 11/05/2004

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EXAMINER

SALAD, ABDULLAHI ELMI

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,895

Applicant(s)

PUTHIYANDYIL ET AL.

Examiner

Salad E Abdullahi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/28/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been reviewed. Original claims 1-18 are pending. The rejections cited stated below.

Claim Objections

2. Claim 7 objected to because of the following informalities: Claim 7 is objected as being of improper dependent form. Claim 7 is dependent to itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al., U.S. Patent No. 6,704,282[hereinafter Sun].

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Sun discloses system for load balancing, the system comprising:

- a LAC (i.e., Access Concentrator 4), the LAC including a contact LNS (i.e., Network Server 22) address, the contact LNS address specifying the address of a contact LNS(see col. 6, lines 59-67);
- a contact LNS communicatively coupled to the LAC (see fig. 1, element 4 and 26);
- a plurality of load balancing LNSS communicatively coupled to the contact LNS and to the LAC (i.e., pool of LNs) (see col. 5, lines 53-67); and
- wherein the LAC sends a message to the contact LNS, the message informing the LNS of its availability and the contact LNS sends a response message containing IP address of a selected one of the plurality of load balancing LNSS to which the LAC should establish a session (see fig. 9 and col. 7, lines 26-38).

As per claim 2, Sun discloses the system of claim 1 wherein the contact LNS is included within a virtual LNS (see fig.1, element 22).

As per claim 3, Sun discloses the system of claim 1 wherein the message informing the LNS of the availability of the LAC is an ICRQ message (see col. 5, lines 53-62).

As per claim 4, Sun discloses the system of claim 1 wherein the response message is a ICRP message (see col. 5, lines 53-62).

As per claim 5, Sun discloses the system of claim 1 further including a CPE(i.e., user device 8) coupled to the LAC (i.e., AC1)(see fig.1, elements 8 and 4).

As per claim 6, Sun discloses a method of load balancing, the method comprising:
obtaining the address of a contact LNS (see col. 3, lines 20-29);
receiving from the contact LNS the address of the next available LNS(see col. 3, lines 20-29 and col. 6, lines 59-67);
establishing a connection with the next available LNS (see col. 3, lines 20-29);and
receiving data and forwarding the data to the next available LNS (see col. 3, lines 38-45).

As per claim 7 Sun discloses the method of claim 7 wherein the step of obtaining an address includes sending an ICRQ message (see col. 5, lines 53-62).

As per claim 8, Sun discloses the method of claim 7 wherein the address of the next available LNS is included in an ICRP message (se col. 3, lines 29-37).

As per claim 9, Sun discloses the method of claim 7 wherein the contact LNS is included in virtual LNS (see col. 3, lines 4-11).

As per claim 10, Sun discloses a method for load balancing between a contact LNS, a LAC, and a next LNS, the method comprising;

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determining whether the contact LNS can provide a session (see col. 3, lines 13-18);
sending a message to the LAC indicating whether the LNS can provide the session (see col. 7, lines 1-9);
obtaining the next LNS address and providing the next LNS address to the LAC (see fig. 9, and col. 7, lines 26-58); and
establishing a connection between the next LNS and the LAC using the next LNS address (col. 7, lines 10-15).

As per claim 11, Sun discloses the method of claim 10 wherein the contact LNS is included in a virtual LNS (see fig.1, element 22).

As per claim 12, Sun discloses the method of claim 11 including the further step of determining the identity of the contact LNS within the virtual LNS (see col. 6, lines 59-67).

As per claim 13, Sun discloses a system for load balancing, the system comprising:
a CPE (end user device 4)(see fig.1);
a LAC (AC1), the LAC coupled to the CPE (see fig.1, elements 8 and 4)(see fig.1);
a first network (14), the first network coupled to the LAC (AC1 4) (see fig.1);
a second network (14)coupled to the first network (32) (see fig.1);
a contact LNS (18) coupled to the first network (32) (see fig.1);

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a next LNS (26) coupled to the second network, the next LNS having an IP address (see fig. 9, and col. 7, lines 26-58); and wherein the LAC sends a message to the contact LNS via the first network, the message informing the LNS of its availability and the contact LNS sends a response message to the LAC, the message containing the IP address of the next LNS, the LAC establishing a connection with the next LNS via the second network (see fig. 3 and col. 3, line 46 to col. 4, line 9).

As per claim 14, Sun discloses the system of claim 13 wherein the contact LNS includes a table and the address of the next LNS is stored in the table (see col. 8, lines 50-56).

As per claim 13, Sun discloses the system of claim 13 wherein the contact LNS is included in a virtual LNS (see fig.1, element 22).

As per claims 16, 17 and 18 the claims include limitations similar to those of claims 1, 6, 10, and 13, thus claims 16, 17 and 18 are rejected same rational as claims 1, 6, 10, and 13.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E Abdullahi whose telephone number is 703-308-

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8441. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to: (703) (872-9306).


Abdullahi Salad
Examiner AU 2157
10/26/2004